



STATE OF MAINE  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JOHN ELIAS BALDACCI  
GOVERNOR

DAVID P. LITTELL  
COMMISSIONER

**Global Companies, LLC  
Cumberland County  
South Portland, Maine  
A-432-71-K-A (SM)**

**Departmental  
Findings of Fact and Order  
Air Emission License  
Amendment #1**

After review of the air emissions license application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., § 344 and § 590, the Department finds the following facts:

**I. REGISTRATION**

**A. Introduction**

Global Companies, LLC (Global) located in South Portland, Maine was issued Air Emission License A-432-71-J-R on 1/30/2008, permitting the operation of emission sources associated with their petroleum storage and distribution facility.

Global has requested a Minor Modification to their License permitting the installation of a hot oil heater firing #2 fuel oil, for Tank #9. Global is also installing a 2000 gallon above ground storage tank to supply the hot oil heater. The tank will store only #2 fuel oil for the hot oil heater and, as such, is considered an insignificant activity per *Major and Minor Source Air Emission License Regulations*, 06-096 CMR 115 (last amended December 24, 2005), Appendix B, Section B(7).

**B. Emission Equipment**

The following equipment is addressed in this air emission license:

**New Fuel Burning Equipment**

<u>Equipment</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Maximum Firing Rate (gal/hr)</u>	<u>Fuel Type</u>	<u>Stack #</u>
Hot Oil Heater	3.1	22.0	#2 fuel oil	5

**C. Application Classification**

The modification of a minor source is considered a major modification based on whether or not expected emission increases exceed the "Significant Emission Levels" as defined in the Department's regulations. This modification is determined to be a minor modification and has been processed as such.

AUGUSTA

17 STATE HOUSE STATION  
AUGUSTA, MAINE 04333-0017  
(207) 287-7688 FAX: (207) 287-7826  
RAY BLDG., HOSPITAL ST.

BANGOR  
106 HOGAN ROAD  
BANGOR, MAINE 04401  
(207) 941-4570 FAX: (207) 941-4584

PORTLAND  
312 CANCO ROAD  
PORTLAND, MAINE 04103  
(207) 822-6300 FAX: (207) 822-6303

PRESQUE ISLE  
1235 CENTRAL DRIVE, SKYWAY PARK  
PRESQUE ISLE, MAINE 04769-2094  
(207) 764-0477 FAX: (207) 760-3143

## II. BEST PRACTICAL TREATMENT (BPT)

### A. Introduction

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 CMR 100 (last amended December 24, 2005). Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in 06-096 CMR 100. BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

### B. Hot Oil Heater

Global is converting an existing #6 fuel oil tank (Tank #9) into a liquid asphalt storage tank. This necessitates the installation of a heater to maintain the asphalt's liquid state. The Hot Oil Heater is rated at 3.1 MMBtu/hr.

A summary of the BACT analysis for the Hot Oil Heater is the following:

1. The Hot Oil Heater shall not exceed SO<sub>2</sub> emissions of 4.2 tons based on a 12-month rolling total. This is the equivalent of firing 200,000 gallons of #2 fuel oil with a sulfur content not to exceed 0.3%. However, at no time shall the Hot Oil Heater exceed a fuel sulfur content of 0.5%.
2. Global shall keep fuel records documenting the amount of #2 fuel oil fired in the Hot Oil Heater that include the sulfur content of the fuel. These records shall be kept on a monthly and annual basis.
3. *Low Sulfur Fuel*, 06-096 CMR 106 (last amended June 9, 1999) regulates fuel sulfur content. However, the use of #2 fuel oil with a sulfur content not to exceed 0.5% is more stringent and shall be considered BACT.
4. *Fuel Burning Equipment Particulate Emission Standard*, 06-096 CMR 103 (last amended November 3, 1990) regulates PM emission limits. However, the Department has determined that a more stringent limit of 0.08 lb/MMBtu is more appropriate and shall be considered BACT. The PM<sub>10</sub> limits are derived from the PM limits.
5. NO<sub>x</sub>, CO and VOC emission limits are based upon AP-42 data dated 9/98.
6. Visible emissions from the Hot Oil Heater shall not exceed 10% opacity on a 6 minute block average, except for no more than one (1), six (6) minute block average in a continuous 3 hour period.

C. Annual Emissions

Global shall be restricted to the following annual emissions, based on a 12 month rolling total:

**Total Licensed Annual Emissions for the Facility**  
**Tons/year**  
(used to calculate the annual license fee)

	PM	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOC	Total HAP
Boilers	18.0	18.0	45.0	45.0	3.0	--	--
Generator #1	0.1	0.1	0.1	0.8	0.2	--	--
<b>Hot Oil Heater</b>	<b>1.1</b>	<b>1.1</b>	<b>4.2</b>	<b>2.0</b>	<b>0.5</b>	--	--
Facility Wide	--	--	--	--	--	20.0	9.9
<b>Total TPY</b>	<b>19.2</b>	<b>19.2</b>	<b>49.3</b>	<b>47.8</b>	<b>3.7</b>	<b>20.0</b>	<b>9.9</b>

### III.AMBIENT AIR QUALITY ANALYSIS

According to 06-096 CMR 115, the level of air quality analyses required for a minor **new** source shall be determined on a case-by case basis. Based on the information available in the file, and the similarity to existing sources, Maine Ambient Air Quality Standards (MAAQS) will not be violated by this source.

### ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-432-71-K-A subject to the conditions found in A-432-71-J-R, and the following conditions:

Severability. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

**The following is a new condition:**

**SPECIFIC CONDITIONS**

**(1) Hot Oil Heater**

- A. The Hot Oil Heater shall not exceed SO<sub>2</sub> emissions of 4.2 tons based on a 12-month rolling total. [06-096 CMR 115, BACT]
- B. At no time shall the Hot Oil Heater exceed a fuel sulfur content of 0.5%. [06-096 CMR 115, BACT]
- C. The Hot Oil Heater shall fire only #2 fuel oil. [06-096 CMR 115, BACT]
- D. Global shall keep records of the amount of #2 fuel oil fired in the Hot Oil Heater and the corresponding sulfur content as well as monthly records showing the calculated SO<sub>2</sub> emissions on a monthly and 12-month rolling total basis. [06-096 CMR 115, BACT]
- E. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Hot Oil Heater	PM	0.08	06-096 CMR 103(2)(B)(1)(a), BACT

Global Companies, LLC  
Cumberland County  
South Portland, Maine  
A-432-71-K-A (SM)

5

Departmental  
Findings of Fact and Order  
Air Emission License  
Amendment #1

F. Emissions shall not exceed the following [06-096 CMR 115, BACT]:

Emission Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Hot Oil Heater	0.25	0.25	1.56	0.44	0.11	0.01

G. Visible emissions from the Hot Oil Heater shall not exceed 10% opacity on a six (6) minute block average, except for no more than one (1), six (6) minute block average in a continuous 3-hour period. [06-096 CMR 101]

DONE AND DATED IN AUGUSTA, MAINE THIS

24<sup>th</sup>

DAY OF

August

2009.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:

*David P. Littell*  
DAVID P. LITTELL, COMMISSIONER

The term of this amendment shall be concurrent with the term of Air Emission License A-432-71-J-R.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 6/23/2009

Date of application acceptance: 6/24/2009

Date filed with the Board of Environmental Protection:

This Order prepared by Jonathan Voisine, Bureau of Air Quality.

